

Translation

PATENT COOPERATION TREATY

PCT/JP2002/000025



PCT 032505

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

10/500252

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 310101240971	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/JP2002/000025	International filing date (day/month/year) 09 January 2002 (09.01.2002)	Priority date (day/month/year)
International Patent Classification (IPC) or national classification and IPC G06F 12/00, 12/06, G11C 16/02		
Applicant RENESAS TECHNOLOGY CORP.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet. <input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT). These annexes consist of a total of <u>11</u> sheets.
3. This report contains indications relating to the following items: I <input checked="" type="checkbox"/> Basis of the report II <input type="checkbox"/> Priority III <input checked="" type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability IV <input type="checkbox"/> Lack of unity of invention V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI <input type="checkbox"/> Certain documents cited VII <input type="checkbox"/> Certain defects in the international application VIII <input checked="" type="checkbox"/> Certain observations on the international application

Date of submission of the demand 09 January 2002 (09.01.2002)	Date of completion of this report 30 March 2004 (30.03.2004)
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

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I. Basis of the report

1. With regard to the elements of the international application:*

- ☐ the international application as originally filed
- ☒ the description:
 pages 1-33, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☒ the claims:
 pages 2-4,6-10,12,14-17,19-21,23-37, as originally filed
 pages _____, as amended (together with any statement under Article 19
 pages _____, filed with the demand
 pages 1,5,11,13,18,22,30-32, filed with the letter of 07 June 2002 (07.06.2002)
- ☒ the drawings:
 pages 1-24, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item. These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☒ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☒ the claims, Nos. 28,29
- ☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

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III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application.

☒ claims Nos. 22-27, 30-32

because:

☐ the said international application, or the said claims Nos. _____
relate to the following subject matter which does not require an international preliminary examination (*specify*):

☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. _____
are so unclear that no meaningful opinion could be formed (*specify*):

☒ the claims, or said claims Nos. 22-27, 30-32 are so inadequately supported
by the description that no meaningful opinion could be formed.

☐ no international search report has been established for said claims Nos. _____

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

☐ the written form has not been furnished or does not comply with the standard.

☐ the computer readable form has not been furnished or does not comply with the standard.

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V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-21	YES
	Claims		NO
Inventive step (IS)	Claims	1-21	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-21	YES
	Claims		NO

2. Citations and explanations

Claims 1-6 and 11-17

None of the documents cited in the ISR describes that (1) interleave write/simultaneous write action can be selected among plural banks in a nonvolatile memory and (2) interleave write action can be performed even among plural nonvolatile memories. This constitution is not considered to be obvious to a person skilled in the art either.

Claims 7-10 and 18-21

None of the documents cited in the ISR describes that simultaneous write action is performed among plural banks in a nonvolatile memory, while successive write action is performed among plural nonvolatile memories. This constitution is not considered to be obvious to a person skilled in the art either.

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

The specification does not sufficiently support the following descriptions in the amendment made in the letter dated 7 June, 2002:

- (1) "the storing of data into the said one group and the action of storing data into a group of memory elements in another nonvolatile memory can be started simultaneously" in claim 22
- (2) "the said second command is issued to both the said first nonvolatile memory and the said second nonvolatile memory" in claim 32.

The specification describes simultaneous writing among plural banks in a nonvolatile memory, and describes only interleave writing among plural nonvolatile memory chips, without describing simultaneous writing among the chips. The specification (page 10, lines 5-9) describes, "After (1) the said first command, (2) a first address for specifying the said first group of memory elements of the said first nonvolatile memory, and (3) the said first data are issued, (a) the said first command, (b) a second address for specifying the said first group of memory elements of the said second nonvolatile memory, (c) the said second data, and (d) the said second command are issued." However, the specification does not describe instructing one command simultaneously to plural nonvolatile memories. Therefore, it is not considered that "the second command" described above is instructed simultaneously to the first and second nonvolatile memories.